

ABSTRACT:

The invention relates to a method of processing an image belonging to a sequence of at least two images $IM(t_1)$, $IM(t_2)$ having a surface representing an organ or part of an organ deformable over time and called the organ surface, said surface including characteristic points, denoted marking points MP, which correspond to each other from one image to another in the sequence. The method includes a step DEF of defining, on an image $IM(t_1)$, a structure per unit length whose deformation is to be followed, $LS(t_1)$, a step CALC of calculating the positions of the marking points $MP(t_1)$ and $MP(t_2)$, and a step DET of determining the parameters of an explicit mathematical expression $f(t_1/t_2)$ of the deformation of the organ observed between the two images. Said determination is carried out from the positions of a set MP' of marking points on the two images. The expression $f(t_1/t_2)$ is then applied in a step AP to the structure per unit length $LS(t_1)$ in order to define the form of the structure per unit length $LS(t_2)$ after deformation of the organ between the two images.

Fig. 1